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Conference Abstract

TaxonWorks

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Abstract

TaxonWorks (http://taxonworks.org) is an integrated workbench for taxonomists and biodiversity scientists. It is designed to capture, organize, and enrich data, share and refine it with collaborators, and package it for analysis and publication. It is based on PostgreSQL (database) and the Ruby-on-Rails programming language and framework for developing web applications (https://github.com/SpeciesFileGroup/taxonworks). The TaxonWorks community is built around an open software ecosystem that facilitates participation at many levels. TaxonWorks is designed to serve both researchers who create and curate the data, as well as technical users, such as programmers and informatics specialists, who act as data consumers. TaxonWorks provides researchers with robust, user friendly interfaces based on well thought out customized workflows for efficient and validated data entry. It provides technical users database access through an application programming interface (API) that serves data in JSON format. The data model includes coverage for nearly all classes of data recorded in modern taxonomic treatments primary studies of biodiversity, including nomenclature, bibliography, specimens and collecting events, phylogenetic matrices and species descriptions, etc. The nomenclatural classes are based on the NOMEN ontology (https://github.com/SpeciesFileGroup/nomen).

Keywords

workbench, open-source, taxonomy, workflow

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